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WESTERN FARMER AND GARDENER.

INDIANAPOLIS, MONDAY, FEBRUARY 2, 1846.

MR. HOFFNER'S SEAT.

The view which we give is a very good picture, but not a very good representation of Mr. Hoffner's place. It here has the look of a good old homestead, with snug and cosey corners. No one would imagine it to be one of the finest specimens of horticultural taste, at the west. The curious in such matters should inspect the beauty of his grass lawns, if they would know what can be made of turf, even in the fervid and thirsty summers of Ohio. Let those who wish to know the pleasure of gravel walks, inspect the paths which he will find here.

Planted on the grass are many rare hardy trees and shrubs, such as the Cedar of Lebanon, (Cèdrus Lebanon) from the Holy Land; the Ginkgo Tree (Salisbùria Adiantifolia) from Japan; Paulòwnia Imperiàlis, a new shade tree, with leaves two feet across with magnificent flowers; eight species of hardy Magnolias, among which the M. grandiflora and macrophylla of the south are conspicuous: different species of the Norway Spruce-firs, Scotch Pines, &c. The curious little Cotoneaster (Cotoneaster Microphylla) from the mountains of Nepal, East Indies, flourishes vigorously—also the elegant leaved Mahonia (Mahònia Aquifòlium) from California, and many others which we have never before seen at the west. Mr. H. has a fine green-house well filled with choice plants, which were kept in fine order at the time we visited it. We observed with pleasure, that while obtaining foreign varieties of plants, Mr. H. does not overlook our native flowers. His grounds were filled with multitudes of species from woods and fields. It is impossible to mention the various floral treasures brought together. One should take a half day to the work of examining them, and then many things will be left unnoticed for lack of time. With a liberality worthy of imitation in other parts of the U. States, Mr. Hoffner admits any person into the garden all days except *Sunday*, if they will recollect the simple rule of "hands off." E. J. H.

AN AGREEABLE TROUBLE.

A gentleman in a letter containing the names of ten subscribers says, "Excuse me for troubling you in this way, if I have done it wrong, for I (having no prospectus) am not acquainted with the regulations of the office." Ah sir, you have an instinctive nack of conforming to the requisitions of the office. The essential particulars of your letter were two, a list of subscribers, and the money in advance. Our patience in bearing such

"troubles" ranks us with the old lady's worthy who, seeing the advertisement "Job Printer," exclaimed, "Poor Job—he's been a printing since I was a little girl—and he must be a patient man."

A TABLE

Showing the result of nine varieties of Peas, with regard to their height, time of blooming, when fit for use, etc.

Names of Varieties.	Height	When in bloom	When fit for use	When planted	Remarks.
Spanish Dwarf Pea - - -	2 to 3 ft.	June 1st	June 24	April 16	Very good
Redman's Imperial Blue -	3 ft.	June 1st	June 24	April 16	Fine
Woodward's Green Marrow	2 ft.	June 15th	July 1st	April 16	Very fine
Early Cedo Nulli - - -	2½ ft.	May 10 to 15	June 6	April 16	The very earliest
Knight's Dwarf Marrow -	2 ft.	June 15	July 6	April 16	Very excellent
Knight's Green Marrow -	2 ft.	June 20	July 15	April 16	The very best of all
Bishop's Early Dwarf - -	10 to 12 in.	May 20	June 12	April 16	The prince of dwarfs
Double Blossom Early Frame	2 to 2½ ft.	May 16	June 6	April 16	Fine and very early
Early Washington - - -	3 to 4 ft.	May 16	June 12	April 2	Plant 2 w'ks earlier than others

It should be observed that, as the early part of the season was so very dry, all the above peas were smaller in point of height than they otherwise would have been.—*E. J. H.*

GREAT YIELD OF BEETS AND PUMPKINS.

As an instance of what Western lands are capable of, Mr. Robert Shoemaker, a farmer near this city, (Cincinnati) received this last season forty seven pumpkins from three seeds, weighing 1071 lbs, occupying a space of ground of 672 square feet, and therefore producing at the rate of thirty-seven tons, or 14,039 lbs. per acre. His beets yielded one to the square foot, which would be sixteen to the square yard, and 2560 bushels per acre; they weighed 68½ lbs. to the bushel, and yielded eighty-seven tons or 13,060 lbs per acre.

E. J. H.

ROOT GRAFTING.

While nothing can be done out of doors in the nursery, the process of root-grafting may now be carried on, and the stock be ready for setting as soon as the grounds are open in spring.

When this method of grafting is employed with discretion, it greatly aids the nurseryman. It is a resource in case he cannot procure stocks to bud or graft upon; it makes finer and handsomer trees; and it can be carried on at a season of leisure; and the scions, being early in the ground, have a longer season of growth by two months than buds, or ordinary grafts.

Although any healthy root with some fibres will answer to graft upon, yet experienced nurserymen prefer the *tap* roots of young seedling stocks. Those who have apple and pear stocks which are to be removed, should employ the open weather of winter to raise them. The tap roots may be taken for grafting purposes and the stocks put away in cellars, or buried in the ground.

We do not know that there is any difference in favor of the root of one variety over another; but it will not do to propagate every variety of fruit by this method. Experience has shewn that some sorts do better by root-grafting than in any other way; but other kinds are very apt to be winter-killed; and some varieties have such a straggling habit of growth, that it would be extremely difficult to train them to a good head; and such sorts, therefore, require to be budded or grafted high up on good stocks. Those of our readers who took the Indiana Farmer and Gardener, will find given in the select list of apples, the best method of working each variety of fruit comprised in that list.

The roots being washed, are cut into four or five inch pieces; and the scions prepared as for ordinary grafting. Splice, or tongue grafting is the most convenient method. Woollen yarn, cut to ten or twelve inches length is wound around it closely at the point of junction. Let the grafting wax be kept in a melted state, by being put in a pan, over a few coals. Holding the work over the pan, with a spoon, pour a portion of the liquid all over the yarn; it hardens immediately, and the whole may be set in rows in a box and covered above the point of union with moist sand, and kept in a cellar till it is time to turn them out in the spring.

It is not to be supposed that winter is the only time which will allow of root-grafting, although it is the best in the economy of time; but the process may be carried on just as late in the spring as is any other kind of grafting.

CUTTING AND KEEPING GRAFTS.

Many experienced orchardists suppose the best time for cutting grafts to be immediately on the fall of the leaf in autumn. That time, however, is long past, and such as have not already secured such scions of fine fruit as they may wish, should do it immediately.

Grafts should be cut in mild weather, when the wood is entirely free from frost. Select the *outside* limbs and the last year's growth of wood. Those who take grafts this year, should be especially careful in examining the condition of the wood; for the late warm weather in fall gave a second flow to the sap, which, being overtaken by cold weather, has damaged the fruit trees, at least in this region, very much.

Too much care cannot be observed in *keeping the varieties separate.* Tie up in bundles and mark the names of each kind as soon as cut. A moment's carefulness may save years of vexation.

When the grafts are to be used at home, it is well to lay them in the cellar where frost will not reach them, and slightly cover them, *so that they shall not evaporate the moisture which they contain.* Too much wet injures them. Half-dry sand is as good as anything, and if packed in an old nail-keg and put in a cool place, they will require no further attention until it is time to use them.

When grafts are to be sent to a considerable distance, they should be carefully wrapped in moist cloth, with folds enough to exclude the air entirely. For convenience of carrying they may be packed, in this condition, in a box, and the space filled in with cotton-wool, chaff, bran, or any similar substance.

It is stated by some, that grafts taken from the lower limbs of trees will produce fruit the soonest; while those from the middle and top and from the upright shoots will make trees of the finest form. We confess a slight prejudice against the lower limbs of trees, as it was thence that "switches" were cut in the mischievous days of our youth, wherewith to apply Solomon's doctrine of discipline. Whether they will make upright trees, we cannot say; but they are supposed to have a tendency to make upright men.

PRAISE IN THE RIGHT QUARTER. — One of the best millers in Allen county, Indiana, has offered one cent more in the bushel for the wheat of every man who will take the Farmer and Gardener. This man is shrewd and clear-sighted. He knows that it will be both for his, and his customers' interest to have agricultural information diffused among farmers. Here is a practical man — a business man, who, as a mere business operation seeks to circulate the Farmer and Gardener. He expects that the wheat brought to his mill will be of a better quality, better cleaned, and more of it.

NOT A BLUNDER AFTER ALL. — Not long ago we laughed heartily at a typographical mistake in which the sentence, "plants raised by *G*alvanism" was made to read "plants raised by *C*alvinism" — a practical result of his system which honest John Calvin hardly dreamed of. But being at a mill one day we had the curiosity to ascertain who were the best wheat-raisers. We asked the proprietor, who brought the very best wheat to mill? "Oh the Quakers." "Well, who bring the next best?" "Why, in this neighborhood, the oldside Presbyterians, I think." "Who next?" "After these all the rest are pretty much alike." This looked a little, after all, like raising wheat by Calvinism! But whatever the Genevan may be at argument, it appears, as usual, that it is hard to surpass honest George Fox in practical matters.

PROSPECTS OF FROST-BLIGHT.

This winter has been very severe upon fruit trees and particularly upon young trees. An intelligent nurseryman who lives in Missouri says that there has been more winter-killing in his nursery than ever before since 1832—a year memorable for the destruction of fruit trees at the west.

But that which gives us the greatest concern, is the prospect of another summer of Blight. The conditions which precede fire-blight, as it is popularly called, have occurred. There was never a finer autumn than that of 1845 for fruit trees until the very last part of it. But the duration of open and bright weather unusually late, and a fortnight of warm weather *set the sap in motion in trees*, and the freezing weather overtook them in that condition. The dissection of the wood gives all those appearances which are supposed to indicate a recurrence of blight. It is therefore a matter of great importance that all cultivators of fruit unite in making observations on this subject, and that it may be done with some unity of purpose,

1. Let the examiner select trees upon which are seen small *water-shoots*, that have evidently grown late in the fall. Usually, a tuft of withered leaves will indicate them. Examine also all the new wood which retains terminal leaves or is winter-killed at the tips.

2. The pith will be, in apples, an iron-rust color,

and in pears greenish black or pepper color; the inner skin will be discolored, and the wood of a greenish waxy appearance. On cutting down to the point where these shoots unite with the branch or trunk, the diseased sap will be found to have discolored the whole neighborhood. In many cases which we have examined, half the trunk is affected. We this afternoon (Jan. 29,) examined a bearing pear tree, which to the eye has not one sign of unhealthiness, but which, on cutting, is found to be affected throughout, and will, undoubtedly, die in spring.

3. Let a comparison be instituted between trees in different circumstances.

Is there any difference between slow growing varieties and those which grow rapidly?

Is there any difference between trees in cold, northern aspects, whose sap, in autumn, would not be likely to be excited, and those with southern aspects?

Is there a difference between trees upon a fat clay or rank loam of any kind, and those upon a warm, dry, sandy loam. It is supposed that any causes which produce a coarse, watery, flabby tissue in a tree, predisposes it to injury by frost, and thus to the blight; and that the fineness and firmness of texture of trees growing in a sandloam on a gravelly subsoil gives them great power of endurance.

4. Let trees which are found to be in an injured condition be marked and examined again as follows:

(1.) At the breaking up of winter, to see if any change of condition has taken place.

(2.) At the breaking of the bud into leaf.

(3.) At the full developement of leaf and when the downward current of sap is begun.

5. It is a matter of great importance to ascertain whether the character of the season which follows such frost-injuries as have befallen fruit trees in this region, modifies the disease. Some think that blight will follow without regard to the ensuing season; others suppose that a *dry*, and warm season will very much prevent the mischief; but that a *moist* and warm spring and summer, will give it a fatal developement.

It is ardently to be hoped that accurate observations will be made, and upon a large scale. We presume that it need not be added that the *exact truth of facts* is the first step toward any sound explanation; and that our object shoud be to *find out facts*, and then, afterwards, to deduce principles.

Singular Skill. — An "extraordinary surgical operation" was lately performed — which was the complete removal of the patient to another world. The physician is doing well.

ON THE ADOPTION OF SEEDLING FRUITS.

Already the varieties of hardy fruits have become so numerous, that not only can they not all be cultivated, but the mere list of names is too bulky to be printed. Downing's book gives a list of 181 apples. The London Horticultural Society's Catalogue, expurgated at that, gives 900 kinds of apples, and 1500 have been tested in the Society's gardens. Manning's experimental grounds and nursery at the time of his death, contained 1000 named varieties of the pear! Swolen as is the list, there are scores annually added; many under the advice of scientific bodies; many have popular approbation; many from the partialities of some parental nurseryman; and many come in, as evil came into this world, no one can tell how.

It has become necessary, therefore, to exclude many from the catalogue, and especially necessary that none should enter without the very best passport. In the main, one set of tests will serve, both for receiving and expurgating; for no matter how long a fruit has been on the list, it should be ejected if, being out, its qualities would not gain it a fresh admission. There are no hereditary rights, or rights of occupancy, in pomological lists.

Titles, rank, antiquity, pedigree and other merciful means of compensating a want of personal merit, may do for *men* but not for *apples*. A very glorious pomological reformation broke out in the London Horticultural Society's gardens at Chiswick, and that Luther of the orchard, Mr. Thompson, has abolished an astonishing number of sinecures, and reformed, if not worthless rotten boroughs, very worthless apples and pears. The Society's first catalogue issued in 1826. Its third catalogue was published in December of 1842. The experience of the intervening sixteen years led to the total rejection from their list, on the ground of inferiority, or as synonyms, of 600 varieties of apples; 139 of cherries; 200 of gooseberries; 82 of grapes; 80 of strawberries; 150 of peaches; 200 of pears; and 150 of plums. Only *twenty-eight* peaches are allowed to stand; and only *twenty-six* strawberries out of the hundreds that were proved. We have no similar society in the United States whose authority would be generally acknowledged. Our only resource is the diffusion of the very best fruits that every neighborhood may have a standard of comparison by the reduction of experience to the form of rules. Although it is difficult to lay down general rules on this subject, there are three which may be mentioned.

1. *No fruit should be admitted to the list and none retained upon it, which is decidedly poor.* — One

would suppose this truism to be superfluous as a rule. But it is only necessary to go out into seedling orchards in any neighborhood in this vicinity to find small, tough, and flavorless apples, which hold their place along side of orchards filled with choice grafted fruit.

2. *No seedling fruit should be added to the list, which is in no respect better than those, of the same period of ripening, already cultivated.*—It is not enough that an apple is nearly or quite as good as another favorite apple. It must be *as* good in flavor, and better in some of its habits.

3. *In testing the merits of fruit, an estimate should be the result of a consideration of all the habits, jointly, of the tree and of the fruit.*—It is in the application of this rule that great experience, and judgment are required. This will be plain, if one considers how many essential particulars enter into a first-rate fruit besides mere flavor.

Of two fruits equal in flavor, one may surpass the other in tenderness of flesh, in juiciness, in delicacy of skin, and in size. It is rare that any single fruit combines all these excellencies, and therefore it is that we retain several varieties, among which such properties are distributed.

There are many fruits which, having good substance and flavor, derive their value from some single peculiarity. Thus a fruit may be no better than many others, but the tree, blooming very late in spring, is seldom overtaken by prowling and irregular frosts. Some of our best fruits, have stingy bearing trees, or trees of very tender and delicate habit; and we are obliged to tolerate more hardy and prolific trees with fruit somewhat inferior.

A few fruits are retained on the list because they have the singular property of being uninjured by frosts, and others because, though not remarkable for flavor, they are endless keepers, of both which properties the Rawle's Jennetan of this region is an example.

In fruits designed for market, beauty and abundance must be allowed to supercede mere excellence of flavor. Some very rich fruits are borne in such a parsimonious way that none but amateurs can afford tree-room.

Nor are we to overlook nursery qualifications; for, of two fruits equally good, preference should be given to that which will work the kindliest in the nursery. Some will bear grafting on the root, some will not; some take well by budding and grow off promptly and with force; others are dull and sluggish, and often reluctant to form the new partnership. While then it will always be to the nurseryman's interest to work such kinds as he can sell the most of, he has a right, in so far as he directs the public judgment of his neighborhood, to give a preference, among equal fruits, to such as work the surest, and strongest. It is as much the interest of the purchaser and the public to have the freest growing sorts, as it is the nurseryman's interest. Thus, if another seckle pear could be found growing on the tree of William's *Bon Chrètien*, it ought to supplant the old Seckle tree; which, in spite of its incomparable fruit, is a vexatious thing to manage; and, as often in the case of other and fairer fruit, makes one wonder how such amiable and beautiful daughters ever had such a surly and crusty old father.

A pomological censor must also have regard to varieties of taste among men, and to commercial qualities of fruit; and to its adaptation to soil and climate.

No one man has a right to make his tongue the monarch over other people's tongue. Therefore, for instance, it is none of my business, if a rugged mouth chooses to roll a slice of the austere Vanderveer pippin, like sin, as a sweet morsel under his tongue. The mild delicacy of an apple which fills my mouth with admiration would be mere insipidity to all who are favored with leather mouths. So that there must be toleration even among apple-mongers.

Nor are the humbler tests of cooking to be overlooked. Some fruits are good eaters and poor cookers; some cook well but are villanous to the taste when raw; some will stew to a fine flavor and sweetness *without sugar;* and some have remarkable jelly properties. But after the largest allowance is made for taste, hardiness, keeping, prolific bearing, color, size, texture, season, adaptation to soils, &c., &c., there will be found we think, a large number of tenants in our nursery mens' catalogues, upon whom should be instantly served a writ of ejectment.

ENQUIRIES,—WHO WILL ANSWER?

Rock and Marl Lime.—A correspondent from Michigan enquires what the difference is between lime made from marl and from stone, for mortar purposes? If no one replies by the next number, we will try our hand.

Hot-beds.—"Will some of your readers give me a good plan for a hot-bed? I cannot afford much expense, and yet would be glad to have one, if it can be made at little cost. If each man who has a good plan would give a brief account of it, your readers would be able to suit themselves by selecting from among them the one best adapted to their circumstances. What garden vegetables require to be started in a hot-bed?" B.

Hollyhocks.—"In conversation with you some

months ago, you remarked that the Hollyhock was becoming almost as much a florist's flower as the Dahlia. Those which I have are only single ones, of no great beauty, and I should like to possess the finer varieties. Can double flowers be procured from *seeds*? Where can seed be procured? What varieties of color are there, and must our order simply call for an assortment, or mention particular sorts? Are fine kinds *named* as florists' flowers usually are? What is the best method of cultivation? An answer to these questions will oblige A LOVER OF FLOWERS.

The finest that we ever saw growing, were at Mr. Hoffner's grounds, near Cincinnati, and we presume that Mr. Ross, his accomplished gardener, can supply the information. If we do not mis-remember, we saw some splendid sorts exhibited at the Cincinnati Horticultural meeting, raised by Mr. Winter. If we are correct in this, we hope that he will favor us with an account of his method of cultivation.—*Ed.*

BREAKING COWS.—"By the way, I have a fine young cow which will calve for the first time in March. Is there any particular way of treating her in respect to milking, by which she will be improved? I had got an impression from some quarter, that a cow might be *started right*, and be a much better milker by one sort of treatment than by another." W.

TIMBER.—"Since you were here, I have mauled rails till I am tired of the business. There is no great romance in clearing heavy timber-land. But what I wish to know is, what has been decided about time the for cutting timber? Either this year or the next, I wish to build, and of course to cut my timber at the right time: Ought timber for a frame to be *seasoned* before it is worked?" H.

MOSS ON FRUIT TREES.—"What shall be done for trees covered with moss clear up to the very top? When seedling trees are in that fix, is it worth while to clean them and try to graft them over, or is it best to cut them down and start a new orchard. This place has been worse abused than I thought it could be possible, for so little time, since it was settled. But the old owner loved whiskey, &c."

YELLOW BUTTER IN WINTER.—"Can butter be made yellow in winter? If so, how? Perhaps that which is sold in stores is made yellow by some coloring matter."

We have other enquiries which we shall give in another number.

POTATOES IN MAINE.—In 1844, the potato crop in Maine, was 12,304,000 bushels only second to that of New York, which was 17,000,000 bushels. New York raised six bushels, and Maine twenty-four bushels, to every person in these respective states. From last year's crop, it is estimated that the loss by rot this year in Maine, cannot be less than $1,230,000, or more than two dollars to every person in the state.

COMMUNICATIONS.

CONDENSED CORRESPONDENCE.

Many letters upon business, contain paragraphs and sentences which we think it worth while to copy:

HAIR BALLS IN CATTLE.—"Is it not more probable that the cattle in Madison got the hair from their own backs than bristles from the ground, to make hair-balls of? since they are always, but especially in shedding-time, licking their own backs; but have scarcely five rods square to go over where any bristles have been spread."—H. L.

Answer.—The balls which we saw were unquestionably made up of *bristles* and not of *hair*. It is hardly probable that they got bristles on their own back, or that hair turned to bristles after being swallowed. There can be no doubt as to the fact that these balls, which I have, are made up of bristles. We have seen in the Albany Cultivator, since writing our article, an account of lambs having *wool-balls;* and in a medical journal we have met a formal discussion of all the varieties of "*Alvine Concretions;*" in which it is stated that they are found in both human and brute animals; and are divided into eight classes, each of which is treated in a manner quite unprofitable to our readers.—*Ed.*

SHADE TREES AROUND SCHOOL-HOUSES.—"On the subject of education, urge the people to put shade trees about the school-houses, cutting large from the *tops* to whip the *bottoms* of the boys if they injure them in any way."—P.

EDUCATION.—"You are now occupying the right ground with your paper. Agriculture and education—these are the great interests to be helped forward, and a Herculean task it is. Let us have a universally intelligent agricultural community, and all will be safe in matters of government. Without this, we can have no assurance of the perpetuity of our free institutions. When shall we have such a community? This generation will first pass away and how many more I cannot tell. Still it is necessary to begin the work, and prosecute it with energy.

"The great mass of the people will not engage in any regular reading; will not take a paper at *fifty cents* a year! This indifference is wonderful, and I never was aware of its extent until since I have been engaged in trying to get subscribers for your paper."—W. T. S. C.

TAKING A HINT.—Being from home, occasionally, and having a wife at home who has taken quite a fancy to the Farmer and Gardener, during my absence, the three last numbers were received by her, and I blush to confess it, while she was intently engaged in reading No. 22, one of our little blue-eyed responsibilities made a charge upon it as sudden and furious as that of Marshal Murat under the Emperor's eye, and actually captured a portion of Esq. Hussey's speech and a large part of the "General observations on the Cerealia," and not satisfied with that, it grieves me to inform you that the "little darling" was more acute and

penetrating than some of our farmers and gardeners, for she actually "took the hint." Now, Mr. Editor, I think by this time, you ought to have taken the hint. Your subscriber begs you to send him, &c. &c.

Yours, respectfully, &c.

SPRINGS IN WAYNE COUNTY, INDIANA.

I perceive that the phrase, *Springs, in Wayne county*, is rather ambiguous. If the reader is in search of a description of our fountains of water, he need not look here.

On page 154 of vol. I, will be found an account of our winters: the present paper will exhibit the character of our vernal seasons.

In the Public Leger, printed in this place, under date of 4th month [April] 14th, 1827, I find the following remarks:

"*Peaches.*—This delicious fruit is principally destroyed in this neighborhood, and northward; but during an excursion a few days since, about fifteen miles to the south, we saw with pleasure, that the prospect was promising. We noticed a perceptible increase of blossom, as we progressed southward."

Several years previous to the foregoing date, say 1823, &c., I well remember our superabundant crops of peaches, which indicated favorable springs.

1828.

5th month [May] 1st.—Woods becoming generally green. 6th.—Cool. The plants in my herbarium electrical, so as to be attracted to the papers at the distance of 2 or 3 inches. 7th.—Fires very desirable to-day. 8th.—Ice. 28th.—Great hail storm: largest stones weighed 38 grs.; wind south.

1833.

3d mo. [March] 16th.—Some farmers plowing. 22d.—Planting potatoes, and sowing oats. 4th mo. [April] 10th.—Peach trees in bloom. 19th.—Planting corn. 5th mo. [May] 29th.—Fire agreeable. In this month last year, corn and potatoes were planted on the 2d.; on the 21st, the Sweet Brier (*Rosa rubiginosa,*) began to bloom; and strawberries to ripen; and on the 31st, green apple and currant pies were eaten. Frost and ice were seen several times at the close of the month.

1834.

3d mo. [March] 9th.—Plowing for oats and potatoes. 4th mo. [April] 10th.—Peach and plum trees in bloom. 26th.—Fruit killed by the cold. 5th mo. [May.]—Middle of the month, winter fires necessary. 19th.—Replanting corn; cherries killed by previous cold, though as large as peas. The noon temperature of this month was as high as 81° and as low as 32°; while the highest temperature of the preceding month, 4th mo. [April,] was 80°, and lowest 29°.

1835.

3d and 4th months, [March and April,] some snow. 5th mo. [May] 2d, planting corn. 16th.—Sheep-shearing. 17th.—Bees swarming. A rainy month.

This was considered a season of great scarcity of provender and breadstuffs. Hay sold at $10 a ton; wheat $1 per bushel; corn 50 cents, &c.

1836.

3d mo. [March] 4th.—Sugar water runs. 24th.—Made sugar. 31st.—Frost nearly out of the ground, which has not been the case for four months past. 4th mo. [April] 5th.—Planted potatoes; and 12th, sowed oats. 5th mo. [May] 4th.—Locust (Robinia pseudacácia,) foliage appearing. 13th.—Shearing sheep.

In another place, I find it recorded that snow fell to the depth of 10 inches on the 9th of the 3d mo. [March]; that on the 12th, the mercury fell to 17° below zero; and that afterward, in the north, the rivers rose four or five feet above their common level. Middle of 4th mo., [April] vegetation stationary, from cold. Frost on the 8th and 9th of 5th mo. [May.] In the same month cut-worms destructive to cabbage, &c.

1837.

3d mo. [March] 6th.—Sugar making. 4th mo. [April] 4th.—Snow five inches deep; and on the 23d, eight in. deep. 29th.—Planting corn. 30th.—Leaves and blossoms all at once developed to-day; while the fields look as lifeless almost as in the midst of winter. Beginning of the 5th mo. [May] a great profusion of flowers on the fruit trees; and the locust blossoms filling the air with their spicy fragrance. A destructive storm passed over the county on the 6th, followed by frost on subsequent days.

1838.

3d mo. [March.]—Average noon temperature of this month 60°; greatest heat 85°, at noon. 4th mo. [April] 1st.—Hail-stones one inch long, with a nucleus of snow and radiations of ice. 15th, 16th.—Thick sleet, incrusting every thing. 17th.—Fruit is not killed by the incrustations of ice of the 15th and 16th.; perhaps because of the subsequent cloudiness and rains. 22d.—Plum and cherry in bloom. 23d.—Peach in bloom. 25th.—Apple and currant in bloom. 30th.—Great frost. Medium noon temperature 58°; highest 84°; lowest 39°.

5th mo. [May].—Vegetation retarded till the 9th, by cloudy weather. Last ten days of the month vegetation nearly stationary. Moths appearing. Medium noon temp. 65°; highest 80° lowest 49°.

Sugar was made this year on the 19th of 3d mo. [March.] 22d of same month, frogs and flies appearing. 31st.—Sowing oats. 4th.—Snow six inches deep. 4th mo. [April] 2d.—Roads quite dusty. 10th.—Heavy frost. 5th mo. [May.]—Several severe frosts this month; the latest, marked "great frost," on the 30th. 12th.—Planted corn; and 19th, potatoes.

1839.

3d mo. [March] 7th.—Making sugar. 17th.—First croakings of frogs heard. 4th mo [April] 3d.—Plowing. 15th.—Frost. 5th month. [May] 4th.—Sharp frost last night. 13th.—Fine rain, which was much needed. 24th.—Replanting corn; the first planting being destroyed by cut-worms. 29th.—Ice.

1840.

3d mo. [March] 5th.—Outer leaves of lilac expanded. Bees collecting bee-bread. Medium temperature 52°; highest 74°, which was on the 1st.; lowest 36°—all at noon. On 11th, at 20° at 6 o'clock, P. M. Amount of rain 3¼ inches nearly. 4th mo. [April] 12th.—Peach, cherry, plum, currant and gooseberry in bloom. 17th.—Apple trees in flower. 26th.—Dogwood and Redbud (cércis canadénsis) in bloom. 25th.—Lilac in full bloom.

Medium temp. at noon, 61°; highest 83°; lowest 41°. Rain 5½ inches.

5th mo. [May] 8th.—Lilac's flowers shed. Fore part of the month, fire necessary for comfort. 23d.—Remarkable hail storm, damaging the gardens. Cart loads of hail could have been gathered the next morning! 31st.—Black aphides migrating in all directions. Locusts flowering. Corn was planted on the 7th.

Medium noon temp. 68°; highest 88°; lowest 47°. Rain nearly 7 inches.

1841.

3d mo. [March] 1st.—Sugar making. 4th.—Snow six inches deep. 24th.—Grass in front yard, quite green.

48½°; 75°; 26°; all at noon. Rain 4 inches.

4th mo. [April] 14th.—Grass every where green. 21st.—Currants every where blooming. 23d.—Plum blooming. 24th.—Cherries blooming; on 25th, in full bloom. 26th.—Apple in bloom; and orchards green; a few forest trees in verdure.

56½°; 78°; 39°. Rain nearly 4 inches.

5th mo. [May] 12th.—Woods generally green. 26th.—Locusts in bloom.

64°; 82°; 44°. Rain nearly 3½ inches.

1842.

3d mo. [March] 3d.—Grass quite green. 6th.—Roads, past week, exceedingly muddy. 25th.—Peach, and 28th, plum trees in bloom. 26th.—Sugar trees beginning to look green. 30th.—Pears in bloom.

59½°; 78°; 34°. Rain 3¼ inches.

4th mo. [April] 1st.—Redbud blooming; 7th, in full bloom. 4th.—Currants flowered; lilac and apple blooming; locusts becoming green; woods greening. 9th.—Some beech trees leafing. 14th.—Dogwood blooming. Woods and town locusts, generally, in leaf. 28.—Lilac flowers gone. Dogwood every where in bloom. Cold nights of 26th, 27th, and 28th, killed many potatoes, tomatos, currant berries, &c.

63°; 79°; 46°. Rain 4 inches.

5th mo. [May] 1st.—Locusts in bloom. Several frosts this month; one on the 14th, injuring sweet potato sprouts.

65°; 74°; 48°. Rain 4½ inches.

1843.

3d mo. [March] 20th, &c.—Troops of cedar birds (Bombycilla carolinènsis,) eating the rotted apples still hanging on my trees. Snow on 22d, 5 inches deep.

30°; 45°; 14°. Rain 2¾ inches.

A comet appeared in view, for days. 4th mo. [April] 15th.—Wild pigeons (Columba migratoria,) abundant. Beginning to plow. 17th.—Grass becoming green; 24th, generally green. 26th.—Sanguinaria canadènsis (blood root,) and claytònia virginica, in bloom. Outer leaves of lilac expanding; also the leaves of apple, cherry, currant and gooseberry.

60½°; 81°; 37°. Rain nearly 5½ inches.

5th mo. [May] 5th.—Wild pigeons flying till 31st. Cherry blooming. 7th.—Peach blooming. 12th.—Apple blooming. 19th.—Pie plant (Rhèum rhapònticum,) generally in flower, (a rare occurrence here.) 27th.—Locusts in flower all over town. Young sugar trees every where through woods, fields, gardens, roadsides, &c. Dogwood in bloom.

67°; 82°; 53°. Rain nearly 4 inches.

1844.

3d mo. [March] 6th.—Frogs croaking. 10th.—Fish-worms perforating the earth in all directions. Lilac buds ½ inch long; leaf points exhibited. Hail storm all night of the 29th, leaving on the ground next day (24th at early morn.) a layer of hail 2½ inches deep. Dried apples, 50 cts.; dried peaches, $1.00; flaxseed, 68 cts.

46°; 62°; 24°. Rain 4¾ inches.

4th mo. [April] 4th.—Blood root and claytònia in bloom. 6th.—Sugar trees in flower. 9th.—Peaches in full bloom. 10th and 12th.—Cherry, plum, pear, and redbud in full bloom. 14th.—Apple in full bloom. Morello peas profusely falling. 15th.—Peach petals falling; 18th, all fallen. 16th.—Lilacs in full flower; locusts leafing; dogwood in bloom; great abundance of blossoms on apple and other fruit trees. 18th.—Woods generally green. 20th.—Strawberries blooming. 22d.—Buckeye in bloom. 30th.—Locusts blooming. Scarcely a twig of multicaulis mulberry killed last winter—now leafing to the very top. Pie plant flowering. Corn 20 a 25 cts.

66°; 78°; 52°. Rain 1¼ inches.

5th mo. [May] 4th.—Locusts in full bloom. 11th.—Blossoms falling and dogwood blossoms gone. 21st.—Cedar birds carrying off ripened Maydukes. Strawberry ripe. 25th.—Privet (Ligùstrum vulgàre,) in bloom. 22d.—Ice and frost, producing, however, no serious effects on vegetation. 30th.—Strong wind, snapping off tree tops.

68°; 78°; 56°. Rain 7 inches.

1845.

3d mo. [March] 7th.—Pigeons flying; lilac leaves expanding. 15th.—Apples, which have lain on the ground all winter, in many instances, perfectly sound. 29th.—Peach trees just blooming; blood root and claytònia in full bloom.

47°; 74°; 20°. Rain 6¼ inches.

4th mo. [April] 3d.—Early cherries and plums in bloom. Cold, of the 6th to 9th, killed most of the cherry, plum, pear, and apple blossoms, and all the peach. 16th.—Currants in bloom; and the redbud.

5th mo. [May] 1st.—Snow ball (Viburnum òpulus,) in bloom, 6th.—Locusts blooming. Lilac blossoms all killed last month 8th.—Frost last night killing or injuring corn, grape shoots, potatoes, walnut, tomatos, and currants, (black, white and red.) Woods all green. Frosts of 24th and 30th, affected corn and tomatoes. 30th.—Privet in bloom.

74°; 84°; 58°. Rain, scarcely ¾ of an inch.

J. T. P.

MISTAKES CORRECTED.

RICHMOND, Ia., January 23d, 1846.

Mr. Editor:—In the 1st January No., 1846, of the Western Farmer and Gardener, I had met with an article under the signature of J. T. P., containing, among other things, the following paragraph, viz: "Well here is No. 1: on page 2, a correspondent tells us, the soil in Wayne county consists chiefly, he thinks, of argillaceous and calcareous earths. Such a soil, except in a bed of potter's clay, or at the bottom of a lime-kiln, will scarcely be found in the Western States. The average of various analyses of the soil of our county would stand nearly thus: silicious portion 86 parts—alluminous 12—calcareous 2: in all 100."

The reference in the above paragraph is made

to a letter of mine addressed to you, on the 30th of December, 1844, in which I stated, that "the av-"erage quality of the soil throughout the coun-"ties," (meaning Union and Wayne,) is what is "usually called second rate; and consists of argil-"laceous, calcareous, and silicious earth; the two "former in my opinion predominating." I am not a mineralogist, nor am I a geologist, and may very probably be wrong as to the quality of the soil. I must, however, think, that J. T. P. is in an error, when he says, that such a soil, except in a bed of potter's clay, or in a lime-kiln, will scarcely be found in the Western States. An argillaceous and calcareous soil may exist without having qualities only of potter's clay, or of a lime-kiln. Chaptal, in his Agricultural Chemistry, says, "Arable soils, which are the only ones of "which I shall here speak, are generally com-"posed of silica, lime, alumina, magnesia, oxide of "iron, and some saline substances. The various "characters of soils arise from the different pro-"portions in which their component parts are "combined: and the name given to each is accord-"ing to that of the predominating earth found in "it, as silicious, calcarious, argillaceous," &c. Alumina, silica and lime, are regarded by agriculturalists as necessary to the formation of a good soil; and the fertility of the soil diminishes as one or the other of the three principal earths predominates. Clay is formed by a mixture of silex and alumina; and these may exist in combination with calcarious and other substances. But it does not follow, that a soil in which clay predominates is a bed of potter's clay, inasmuch as the clay may very little predominate, and it may be in combination with other substances not found in a bed of potter's clay. The same may be said of a calcarious soil. Its component parts may be nearly equal, and yet the calcarious earth may predominate, and it will not be a lime-kiln. Great reliance may, in general, be placed in the analyses of J. T. P., but in the case above mentioned, I cannot but think there is some mistake. The southern part of Wayne and the county of Union, are not essentially different in their soils; and it is possible I may have been misled, (if indeed I am, on this point,) by the report of Mr. Owen's Geological Survey of the counties of Union and Wayne. He says, "the soil of Jefferson, Switzerland, Dearborn, Ripley, Franklin, Fayette, Union, and parts of Decatur and Rush, being formed upon alternating strata of clay and limestone, must partake chiefly of these two earths." In looking over the southern part of Wayne, I supposed the difference was not so great as to change the general character of the soil; and I supposed I might safely affirm of the two counties, that the argillaceous and calcarious earths predominated. See the 29th page of Mr. Owen's first report.

Numerous analyses both in this country and in Europe, have fully proved, that a soil consisting of 86 parts of silicious, 12 of aluminous, and 2 of calcarious earth, would be very unproductive. If my views are all wrong on this subject, I hope J. T. P. will be able to set me right, and at the same time correct the error, which I have made so public.

In the article of J. T. P., to which I have already alluded, the following paragraph may be found, viz: "But what is this in No. 3, page 34. "Richness of land maintained by weeds and grass "forever!" (any length of time?) But as the correspondent is 'confident' in the matter, having 'fully tried the experiment,' perhaps he will not consider it impertinent, if we ask the precise age of the old man." The old man will not regard the interrogation as impertinent; and he answers the question by saying, that he is 47 years of age. The statement of mine to which the paragraph alludes, is as follows, viz: "Another objectionable "practice, is that of pasturing our stubble ground "after wheat and oats have been taken off. This "should never be done: and yet it is almost always "done by every farmer. On land off of which "wheat, or oats, or barley have been taken, a crop "of weeds and grass generally springs up. The "weeds give but little nourishment to cattle, but "a great deal to the soil, if properly managed. "My own practice has been unchangeable for the "last ten years in this respect. When wheat has "been taken from the ground, the weeds and "grass are permitted to grow undisturbed until "the last of September, or the first of October; "the ground is then deeply plowed, and permit-"ted to remain in that condition until the follow-"ing spring, when it is replowed, and the spring "crop planted or sowed. In this way, I am con-"fident that land of ordinary richness, may be "maintained for any length of time, without one "particle of manure from the barn. I have fully "tried the experiment." It is a rule of construction, that the whole statement shall be taken together. And what is the statement? It is, that I have followed the practice of plowing in the grass and weeds on my land for the last ten years; and that my land has been improved by this practice. Of this, I am confident. I do not assert that I have tried the experiment *forever;* but that I have fully tried the experiment. And can the experiment be fully made in ten years? Most certainly it can. I find my soil grows better by this culture; and having tried it for ten years, I infer it would so continue. General truths are inferred from the observation of particular facts. That the sun will arise to-morrow morning, or that a heavy substance will fall to the ground, or that gunpowder will explode on the application of a spark of fire, or that a chemical affinity exists between two substances, are general truths inferred from habitual notice of the particular cases. When I say, that good wheat sowed in a congenial soil, and at a proper season will grow, I state what experience has fully taught; and yet I have not seen wheat grow forever.

I am, sir, most respectfully yours. &c.,
JAMES PERRY.

KEEPING PARSNIPS IN WINTER.

The best plan for keeping the parsnep is, to gather them late in the fall and top them very close; bury them in the ground like potatoes, but not so deep; early in spring take them, and if any have commenced growing, top them again, and put them in a situation where they will neither grow or wither too much, and they will keep good till other vegetation is fit for the table; at least this is my plan, which I have learnt by experience.

The seed should be kept bottled up close.

G. M.

NATIVE GRAPES.

CINCINNATI, Dec. 7th, 1845.

Dear Sir: — Your letter is received, making enquiry in relation to the Herbemont, and Lenoir Grapes. I procured both from S. W. Herbemont many years since, and have always supposed them different grapes. But this season, my vine dresser, (at the vineyard where I cultivated them most extensively, and where wine has been frequently made from the former, but never from the latter) expressed to me an opinion, that they were the same grape. Never having entertained this opinion, my attention was never particularly directed to the vine when growing. The little observation that I had given them, led me to suppose that the Lenior made a much greater growth of wood; that the fruit was equally fine for the table; that the fruit of the Lenior was generally the smaller berry; the bunches nearly as large, more pointed, and the berries much more compact in the bunch. I thought the Herbemont most disposed to rot. It is very subject to the rot, both here and at the south. My impression was that I tried the Lenoir for wine, by manufacturing a single bottle, and found it different from, and inferior to the Herbemont. The bunches of the Herbemont, I thought generally larger than the Lenoir, and the fruit generally to be preferred, as its open character occasioned its ripening better. My impressions were somewhat staggered this fall, as Mr. Fitzhugh of Madison, sent me several bunches of grapes, as the Herbemont, and there was a marked difference between them. Some of the bunches were pointed, very compact, and the fruit small. Others, were longer, fruit larger, bunches not compact, not pointed, and exactly agreeing with my impressions of the Herbemont. On examining the fruit in my own garden, I found both descriptions of bunches on my Lenoir vines. I had neglected getting the Herbemont in my garden till two years since, and had none of them in fruit. The wood agrees in color, but the fruit-buds in the Herbemont are very close together, in the Lenoir, the reverse. On this, however, I place little reliance, as the Lenoir are old vines; the Herbemont, young and small. I have two varieties of grape, that the fruit nearly resembles each other. The wood, leaf, and growth the same, and one difference only can be discovered; but that is a marked one. The leaves at the ends of the growing shoots, in the one are a rich green; in the other, the young leaves always have a white tinge. At present, I can say nothing definite in relation to these grapes. Next season, I will note them when growing, and settle the question. I can readily do it, as I shall have them growing on the same trellis.

Advise all who are planting vineyards, to place no reliance on foreign grapes. I was twenty years at this, and spent some thousands of dollars to no purpose. I do not now cultivate a single foreign grape at my vineyards. Let us raise new varieties from the seeds of our native grapes. Let us cross our best native varieties, with each other, and with the best foreign kinds, both for the table and for wine, and plant the seed. The Catawba is clearly an improved variety of the fox grape. I have yet seen none of its seedlings equal to it, and most of them, have the thick leather leaf of the Fox, and its hairy stem. I have had three or four white varieties from it.

Our promise of grapes was never so great as at the early part of the present season. We had no rain till June, and many tenants calculated on making 500 barrels of wine. The late frost affected us some, but the wet weather in June caused our fruit to rot and drop. As it was, we made upwards of 300 barrels, and the wine of this season is of superior quality. We shall be able, with more experience in fermentation, to rival the best Hock wines of the Rhine, and our Catawba grape is also calculated to make a Champaigne wine, to rival the best sparkling wine of Europe. We want persons from France who understand its process of manufacture perfectly. It requires skill, and much labor. Such a person would find employment. The best champaigne wine I ever drank, was made by one of my German tenants. Yet he only *partially* understood the process of manufacture. A person who professes to understand it, is now trying his skill. We shall not know the result till next summer, say, next June I yearly get a few varieties of native grapes, growing in different parts of the Union, principally, in Virginia, and in the west and south. It is a subject of serious regret, that persons of intelligence will not turn their attention to the subject. In former years, I obtained many varieties from different States, that were highly recommended, but most of them proved to be of inferior quality. I believe I have discovered the origin of the grape I have called the Ohio, and that it is a native of our own State. I am informed that the same grape is abundant in some parts of Virginia, and that a grape greatly resembling the Catawba, and equal to it, if not the same, also grows there. I am also furnished with two fine native varieties from Clermont county, in this State. One of them, a red grape. Ethan Stone, Esq., informed me he ate this grape in Champaigne county, forty years since; that it was of fine quality, and he had it introduced into his garden. He changed his residence, and the vine was destroyed.

The cultivation of the grape on the Ohio, for wine, is now progressing rapidly, and within the next twenty years, wine will be an article of export from this region. The Germans have taken up the subject in earnest, and learnt us to abandon the use of sugar in the manufacture of wine. For some years, they had a prejudice against American wine. They now give it a decided preference, and the present produce, is not equal to the consumption of our German population. Those who use this wine, are generally of sober habits. The dissipated, prefer a stronger drink.

Yours, respectfully, N. LONGWORTH.

PREVENTION OF GAPES IN CHICKENS.

Mr. Editor: — You asked me awhile ago how to cure chickens affected with the gapes. But "an ounce of prevention is worth a pound of cure," so I will give you some directions how to prevent them, believing that any person who will not take the trouble to prevent them will surely not take the trouble to cure them and keep them cured.

The whole direction may be given in three words—*keep them healthy.*

If your readers would like to know how this can be done, I reply, let the place where they roost be warm in winter, cool in summer, well ventilated, and so clean that your own nose would per-

ceive nothing offensive in their house. Let the poles they roost upon be of cedar or sassafras, and wash them occasionally with a strong decoction of tobacco.

Prepare them, in some dry place, a borough, with some sifted cinders from a blacksmith's window, or other preparation as good, that you may, by all means, have your poultry free from the chicken's enemy, *lice*. Keep pure water by them constantly. Your hens will drink more than ten times a-day. When a setting hen comes from her nest, she does not know which to run to first, food, water, or the burrough, but will use all three thrice in fifteen minutes.

Do not give the young chickens corn meal simply wet with water, but occasionally wet it with *sour milk, soap-suds or lie, and generally cook it in some way;* sometimes bake it in the *hot ashes*, or salt and pepper it, and it will not only prevent but often cure the gapes.

In town, or where you have but little range for them, do not try to raise more than a dozen or two, and let these be hatched early in April to give you eggs the next fall and winter. If you try to raise more in your narrow limits with these older ones, you will not be successful.

Let the chickens be kept in a dry place, feed them as soon as they come out in the morning, to prevent the hungry mother from taking them too fast and too far in the wet grass.

Besides these and one other suggestion, which good sense will direct, there is one, more important than any other, i. e. *change your whole stock once in three years*, and a large part of it *every* year.

Do it in this way. Select as many of your most healthy young roosters as you need, about one to eight hens; and as many of your best pullets and hens as you wish to keep, and kill or sell all the remainder. Take this select stock and go out four, ten, or forty miles, and exchange all your roosters for as many healthy ones with *one man*, that they may not fight; then exchange your hens and pullets at two or three other places, and they will give you twice as many eggs and raise you twice as many chickens as you raised last year, and unless they are very badly used, you will not see one die with the gapes.

Your old friend, PARVUS.

SUNFLOWER-SEED OIL.

Mr. Editor:—A few days ago, I saw the first number of volume second of the Farmer and Gardener; on the eighth page of which is a piece on the subject of sunflower seed. I suppose I am the person there alluded to, who "tried an acre of it this year." If so, I must say that you are not quite correct. I planted nearly an acre, I think, in 1843, on a level piece of ground. The season was so wet that at harvest the best of it was not much over knee high, and nearly the half of it not more than half that height; and on this account it did not fill well. When I thrashed it out I had twenty-eight or twenty-nine bushels, and I suppose the birds took two bushels.

I prepared my ground as I would for corn, and planted the seed in hills and left three stalks in a hill and plowed it both ways, as often as I did my corn. I did not take off any of the branches that came out on the stalk; which, I think, ought to be done, leaving only the main top. When the seed got ripe, so as to begin to fall out, I spread a wagon-sheet in my wagon-bed, and drove into the field, and, with a knife, cut off the top and threw it into the wagon, hauled them to the barn floor, and with a stick or flail knocked out the seeds. This is very easily done, when they are dry. I then raked off the trash, and ran the seeds through the fanning-mill.

An eastern writer says on this subject: "Under proper cultivation and with a medium soil, it yields from sixty to seventy bushels to the acre. The machinery for crushing and expressing will cost about $300. One bushel of the seed will yield three quarts of cold, and one [four?] of hot pressed oil. The uses to which this oil is adapted are various. It is equal to olive oil for table use; and superior in many important respects to sperm, for lamps; while for paints and machinery, it is well adapted to supercede the oils used for them.

"For burning in lamps the sunflower possesses one advantage which has been an object of deep solicitude ever since sperm oil came into use; it has no perceptible smell. Hence sick persons and others to whom the smell of sperm oil is so offensive, can use the sunflower oil with perfect freedom. Its advantages in this respect have been fully tested in Philadelphia, where it is recommended by some eminent physicians, and is in constant use by their patients.

"It has another important advantage over sperm oil, it affords about one-third more light; that is, sunflower oil will last one-third longer than sperm, while it affords the same quantity of light."

Mr. Barnitz has invented a new process of crushing the seeds and expressing the oil. He recommends the producer to crush the seed and express his own oil; but every farmer cannot do this, as the expense would be too great. If some person would erect a machine, the farmers would soon give him plenty of business. It is said that Cha's A. Barnitz, of York, Pa., will give any information that may be required.

Marion Co., Ia. CLERK KITCHING.

KEEPING CABBAGES IN WINTER.

BLOOMINGTON, Ia., Jan. 13, 1846.

Mr. Editor:—In No. 22 of the "Indiana Farmer and Gardener," there is a letter from Mr. Daniel Embree, on the subject of "preserving cabbage in winter," in which the writer states that during the winter of 1842, some dozen heads that were accidentally left in the "patch" top downward remained as sound and green as when left there, with the exception of some outside leaves. Now anything which relates to such a delicious vegetable as the cabbage, always arrests my attention. What a host of pleasant memories crowd upon me. In these "piping times of peace" when the rapid progress of civilization has driven from the table those luxuries of our boyhood "bacon and cabbage," I hope I shall be excused for breathing a passing sigh to those old, much-loved friends of my early life. In the cultivation of a small garden-spot it is my custom to have about fifty good heads to put away, and the best mode of preserving them has, for some years, been with me an important object. Like Mr. Embree, I have tried many different ways, with more or less success;

but the best mode, I feel assured from my experience, for a family who produce, and put away only for their table, is the following:

At the proper time for putting away your cabbage, take the spade and dig the ground up about three or four inches deep, commencing by the root of the cabbage and spading a trench or hole out from the root a distance equal to the height of the cabbage. Then pull off the decayed outside leaves and bend your cabbage with the root still in the ground where it grew into this hole, protecting the head as much as possible by closing around it the outside leaves. Then cover the head over with dirt, elevating it three or four inches above the surface to turn off the rain and point out the exact spot where the cabbage head is. Put up in this way, if one head is injured in the least your cabbage is not of as good a kind as mine, or you were not careful in following the directions. In this way put up, one can be taken for use at any time without interfering with the others. By this plan I have found that there is no necessity for pursuing the mode pointed out in No. 23, page 367, to produce heads: for cabbages put up in this manner, although green and almost wholely unfit for use, will turn out in the spring solid, white, firm and tender. I am no philosopher, upon such matters; I only communicate the facts, and one's facts may be useful while his deductions are untrue and erroneous. But, I have thought that a state of celibacy was most suitable for *cabbage-heads*.

In open weather they continue to grow and head up and whiten when thus put up. It is some labor, it is true, to do them up in this manner, but that is no obstacle to an industrious man, and a lazy one will never take your paper, and therefore, not see this article, or if he did, would rather let his neighbors' cows get into his garden for want of a good latch, and destroy them—in a passion kill her, and then have a vexatious lawsuit about the price of her that would compel him to sell forty acres of land to pay sheriff's, clerk's, and attorneys' fees. I was led to adopt this plan for preserving cabbage, from observing as I was riding by her house, a worthy lady of this county engaged in "doing up" her cabbage in this way and then in the spring following, hearing our town people boasting of the fine cabbage heads they had purchased from her husband, and since that time I have practiced upon her "hint" with uniform success. Most of your readers may be familiar with this mode, but if generally known, so far as my observation has extended it has been but rarely practiced, and with the exception of the two articles above referred to, the cabbage has had the 'cold shoulder' turned to it in the Farmer and Gardener, which is my only apology for the length of this article. JOHN S. WATTS.

SEEDLING APPLES---PUTNAM RUSSET, &c.

BLOOMINGTON, Lawrence Co., O.

Mr. Editor:—

I avail myself of the occasion of sending you the names of a few subscribers, with the enclosed, to address you in relation to a few matters in which I, in common with others, feel no small interest. We look to the "Western F. & G." for information on several subjects with which you, and other persons of experience about Cincinnati, are familiar; but of which we are comparatively uninformed. Permit me to suggest one—the manufacture of wine. The grape is grown here in great luxuriance and abundance, but we know little of the process of making wine. Had we as much knowledge of the *modus operandi* as would enable us to manufacture as much as might be convenient for domestic use, it would be to us of no little value. Were you to publish in the Farmer directions, or brief but definite recipes, of the different modes practiced by the wine-makers in and about Cincinnati, applicable to the different varieties of the native grapes found best adapted for wine, they would be to us, and, I presume to many others, extremely acceptable, and add to the value of your periodical.

Allow me next to observe, that the Horticultural Society of Cincinnati cannot do a better service for the public, than to correct and arrange the nomenclature of western fruits,—in which work, all lovers of good fruit, far and near, should heartily cooperate. Great confusion prevails, embarrassing to all. The works of eastern pomologists, such as those of Kenrick and Downing, valuable as they are acknowledged to be in many respects, contribute very little in extricating us from this confusion. Nay, in some respects, they make confusion worse confounded. Let me give an instance of a well-known apple largely grown in the west. Kenrick, and Downing, both describe the Putnam Russet as a distinct apple from the Roxbury Russet. The latter says, that the Putnam Russet *originated* at Marietta, Ohio. I resided for a number of years near Marietta, and the following brief history of this apple I have often heard, and believe to be substantially correct, as I never heard it contradicted there. The Putnam Russet *did not originate* at Marietta—*it was brought there* by Israel Putnam, grandson of old General Putnam, of Pomfret, Con.; to the former, by the way, the west is greatly indebted for many of its best fruits. Israel Putnam was among the first emigrants to the then Northwestern Territory. He settled on the Muskingum river, a few miles above Marietta. At a very early day he went east, and collected scions of all the best apples that could then be found, and, on his return, engrafted the first good nursery at his residence near Marietta. This apple was the product of some of these scions from the east, called subsequently after Putnam, because he first propagated it in the west; but always believed, about Marietta, to be identical with the old Roxbury Russet. The difference of the two apples in size and appearance, (if indeed there is any marked difference,) upon which some have predicated the opinion that they are two distinct kinds, may be readily accounted for from the influence of climate, and soil. The Rhode Island Greening grown in the east, is very different from the same apple grown in Southern Ohio—the former, dark green, large, keeping till March; the latter, paler green, inclining a little to yellow, larger, and fully ripe in November. You see, and other western pomologists must have noticed, that many of the eastern apples, known to be excellent keepers in New England, prove, in the west, to be nothing better than autumn fruit, in consequence of their more rapid growth, and early maturity here. The

Rhode Island Greening, and Bellefleur are marked examples. But all, so far as I have noticed, are inferior here as keepers to what they are when grown at the east. This fact has suggested to me, that it would be a wise policy of nurserymen, and fruit-growers, in the west, to select more of their apples, intended for keepers, from natives of the west and south. These are adapted to our soil and climate; many of them known to be excellent keepers, and not inferior in size, or quality, to the best keeping apples of the east. There is scarcely a fruit-growing neighborhood in the south-west, that cannot furnish one or more seedlings of such apples—this can furnish two at least. Were these apples collected, their respective qualities fairly tested, and appropriately named, they would form a collection of winter-fruit, rarely surpassed in quality, while, as keepers, they would be far superior to the best eastern varieties when grown in the west. But the eastern apples should not be repudiated. For the same reason that the winter apples of the east are not so suitable for the west, in consequence of their more early maturity when grown here, the summer apples of that region are so much the better adapted to the west. The eastern autumn apples would follow in succession, producing here late summer, and early fall; and the winter apple, late fall, and early winter fruit. If the native apples of the west, with those adopted from the east, could be arranged according to the above views, and described, not as the latter are by eastern pomologists, but as they are found upon trial when grown here, and published in a book, or pamphlet, it would, I conceive, be to us of much more value, so far as apples are concerned, than any eastern pomological work. Will not some one of the Cincinnati connoisseurs undertake it? B.

Since the above was put in type, the Western Reserve Magazine has been received. Schuyler Putnam, of Elyria, O., states in a letter, that his grandfather, Gen. Israel Putnam, found the apple now called the Putnam Russet in Warren, Litchfield county, Conn., and that Warren Russet is the name by which it should be called, as it originated at that place. He states that he was well acquainted with it, in Brooklyn, Conn., and also at Marietta, Ohio. This settles the matter. The Warren or Putnam Russet is distinct from the Roxbury.—Ed.

LETTERS OF A COSMOPOLITE---No. 1.

Columbus, O., January 19, 1846.

Messrs. Editors:—When the new year brought with it a new volume of your paper—a new vignette—a new name and a new editor, said a voice within me, "I wonder whether they do not want a new correspondent?" Now this present writing is to determine the doubtful point, whether to you and your *well-fed* (since you are the stewards,) readers, a wandering cosmopolite correspondent will prove acceptable.

Columbus—the Jerusalem of Ohio—is in winter a large lively city, and in summer, an empty and dull city site; but at all times the capital of Ohio, because forsooth here is the State House, and, a far handsomer building, the Penitentiary. Of the former, I have only to remark, that it is precisely like the Marion county Court-House, in Indianapolis, only "more so." Its most striking features are, an imposing redness of its decaying bricks, and a more imposing, because long and almost illegible, poetical inscription over either door. Here sit the *youthful* law-makers of Ohio. Hard by, in the entry, stand little boys who sell apples and candy to the *younger* members, and fight now and then to amuse the elder ones.

So far in my life I have obeyed laws, because my early simplicity and subsequent verdancy have allowed a feeling to exist, that State *laws*, like the laws of nature, had in themselves their own efficiency; owing their existence to no mortal influence, and yielding up their authority at no human mandate. But, lo! the story is all told, and this *blind* worship is all swept away, when in a little dirty room, warmed by a huge wood fire, and held up by crooked wooden pillars, I find men getting together after a good dinner, and talking about—nay, *actually making laws*. By what authority do these men sit here, and rule over a million and a half of human beings—sometimes with, and sometimes without wisdom—always liable to error, and never sure of but one thing—*obedience*? This is the point whence may be most clearly seen the moral sublimity of voluntary self-government.

There is, however, but little in the realities of legislative action that is interesting to the stranger; forms and technicalities—local matters and general interests—are all so mingled, that to the casual visitor they become utterly unintelligible.

Adjoining the State House is a long row of old looking buildings, terminating in a shabby house, used as the U. S. District Court-House offices; while the row itself is occupied by the State offices and the State Library. In the latter, is a miscellaneous collection of books, etc., many of them of standard interest and value; though, as I think after a hasty inspection, hardly as numerous or as judiciously selected as those in the Indiana State Library. The Law and Miscellaneous Library are in the same small room, and often mixed upon the same shelves. Here, too, are packed away the standard Weights and Measures of Ohio, of which I will write more at large in my next letter. On the window seat, lie piles of bills of former legislative sessions, dusty, dirty and torn. In short, this little State-Library-Room, seems to be a sort of respectable catch-all—a little closet, holding all the "*goodies*" the State happens to possess.

Now it is an unsettled question how soon a new State ought to build permanent public buildings. Indiana undoubtedly built too soon to build well; and perhaps Ohio is as much behind her duty in neglecting the matter so long. Still too much praise cannot be allotted to that honest legislation which, in these days of repudiation, refuses to ornament the Capital, or accommodate its officers, at the expense of State creditors; while the merit of having already attended most faithfully to the duty of providing asylums for the unfortunate, and restraints for the vicious, certainly belongs in an eminent degree to Ohio. The money and labor expended in founding and supporting the three great Asylums here, and for establishing the Penitentiary on so noble a foundation, is far more

honorably expended than if a noble State House had swallowed up the whole amount at a single gulp.

But the facilities of procuring any amount of excellent building stone, and the unlimited amount of cheap labor available to the State from convicts, as well as the elegant plan already adopted, and the foundations already begun, and, lastly, the increasing growth and prosperity of the State,—all these render it certain that ere long Ohio will show what she can do for the public honor and taste—by building a Capitol second to none in the Union.

I have spoken of building stone as abundant here. It is obtained from two sources: the nearest quarry being on the Scioto river, about six or eight miles from the city, to which a temporary railroad is now constructing for the convenience of the Penitentiary laborers.

This stone is a limestone, as its name indicates, of a richly varigated brown color when polished, but mottled grey when finished by the hammer. It is full of fossils, so that the Columbus mantelpieces are often quite instructive as geological collections. But it is so unequal in its grain, that a uniform polish is impracticable. By burning, it affords a good lime, though not white enough for plastering. Of this stone it is proposed to build the new State House.

The second kind is the "Waverly Sandstone," found below Chillicothe, on the Ohio canal, and near Portsmouth, on the Ohio river. This material, being familiar to all, I will not stop to describe it.

My next letter shall contain scattering thoughts after calling at the *four* asylums here. The deaf and dumb—the lunatic—the blind—and the asylum for the wicked. T. K. B.

AN ESSAY UPON THE WHEAT FLY,

By Asa Fitch, M. D., Salem, New York.

[CONDENSED FOR THE FARMER AND GARDENER.]

The above is an article in pamphlet form from the American Quarterly Journal of Agriculture and Science, containing some original observations and interesting facts respecting the wheat fly. Under this name the author includes the Cecidomyia tritici or wheat fly, previously described by the naturalist Kirby, and another species differing from the above in its spotted wings, and first noticed by himself. Belonging to the same genus and alike in habits and in transformations, they may both be conveniently described under the same common name.

Its Foreign History.

The first distict and unequivocal account in this insect, is that given by Mr. Christopher Gullet in 1771, and published in the Philosophical Transactions of the Royal Society for that year, from which it appears, that its ravages had at that period been felt by the farmers of England, although imputed by them to a wrong cause. It will be seen in the sequel, that both in this country and in Europe, agriculturists have often mistaken for this insect a small *black* fly of the family of the Muscido, which occurs abundantly in wheat fields, but is comparatively harmless. Subsequent to the above, we find in the Transactions of the Linean Society for the year 1797, a paper by the celebrated entomologist Kirby, giving a scientific description of this insect, and correctly defining its generic and specific character. He refers it to the genus Tipula or gnats, of the great order of Diptera or two-winged insects of Cuvier or Latreille. The genus Tipula having been sub-divided into numerous sub-genera, the species in question falls under that of *Cecidomyia*, and is correctly styled the Cecidomyia tritici of Kirby, though often spoken of in our agricultural papers under the name of the Tipula tritici

From the labors of later writers, particularly Professor Henslow and John Curtis, who have given precise and accurate descriptions and delineations of this insect, it appears certain that it is identical with the clear-winged wheat-fly of this country. The spotted-winged species has not been noticed by them, or if noticed, confounded with the preceding.

The ravages of the wheat-fly on the other side of the Atlantic, at different periods, appears to have been very extensive, having been noticed in most of the southern and eastern counties of England, in some districts of Scotland, and in the north of Ireland. Whether it occurs upon the continent of Europe we are not positively informed. It is not noticed by Macquart, either in his Diptera of the North of France or in his Natural History of Dipterous Insects, while other naturalists are of opinion that it has been found both in France and Germany.

Its Domestic History.

It will be unnecessary to specify particularly, the various notices of this insect, that have appeared in the agricultural papers of the northern States during the last twelve years. The more important and valuable of these may be found in the volumes of the Cultivator and the New England Farmer. An excellent summary of the history and habits of the wheat-fly, both in this country and abroad is also given in Dr. Harris' Report on the Insects of Massachusetts. In the earlier notices of this insect, great difficulty was felt by practical farmers in ascertaining the precise nature of the animal which caused annoyance. The correct view, however, now universally prevails, that it is a fly, peculiar in its habits, and differing from all those previously known in this country.

Mr. Jewett says the wheat-fly first appeared in western Vermont in the year 1820. (New England Farmer, vol. 19.) It was not until the years 1828 and 1829 that it became so numerous as to attract attention; the same year, be it observed, when its ravages were so annoying in Scotland. It was in the northern part of Vermont, that it became so excessively multiplied at this time; and from that as a central point, it seems to have extended in nearly all directions. In this vicinity, one hundred and twenty-five or fifty miles south of the locality above-mentioned, it was observed in 1830; and in 1832 the wheat crops were so completely destroyed by it, as to lead to a general abandonment of the cultivation of that grain.

The history of its career appears to be quite uniform in most of the districts hitherto visited by it. About two or three years after its first arrival at a particular locality, it becomes most excessively multiplied, and the devastations which it then commits are almost incredible. Many cases have occurred, in which a diligent search by dif-

ferent persons has failed to discover a single kernel of grain in any of the heads of an entire field. This havoc, so extreme and general, but not universal, lasts but one or two years. The numbers of the pest and its consequent ravages soon become sensibly diminished, and often the lapse of a few seasons, the cultivation of the wheat crop is again found to be comparatively safe. Facts show that the fly has now become a permanent inhabitant of many parts of the country, for the most part attracting little attention, but at intervals appearing in great numbers. This being the case, it is important that the entire history and habits of this insect should be accurately traced out.

Its Habits.

From the more detailed remarks of the writer, it appears that this fly is an exceedingly minute insect, less than the one-eighth of an inch in length, with two wings, spotted in one species, in the other clear. The antennæ are about as long as the body, the eyes deep black, face yellow as also the thorax. The abdomen is throughout of an orange color, more inclining to red than yellow. There are six legs of a whitish yellow color, long and slender, and nearly of the same diameter through their entire length. All the parts of the body are clothed with minute, slender, longish hair. The mail is somewhat smaller in size than the female. In searching for this insect in the field, care must be taken to avoid mistaking for it a small *black* fly, about one-third of the size of the common house-fly, and resembling it in appearance.

The wheat-fly may be met with daily, from the fore-part of June, until as late as the middle of August. Although it congregates in swarms about fields of wheat at the time it is in blossom, yet it also occurs in a great variety of other situations. It often enters houses, upon the windows of which it may be observed dancing along the panes of glass. It may also be taken among the grass of pastures and of alluvial meadows that have never been turned up by the plow.

The fly during the sunshine of the day, moves about but little, remaining mostly at rest, or lurking about in the shade furnished at the roots of the growing grain. In the twilight of the evening, it becomes active, and continues so, it is probable, during the entire night; for before the morning sunrise, it may be seen abundantly upon the wing, though less agile than in the evening, as if now become somewhat wearied, or rendered sluggish by the coolness and dampness of the night air. It is during the evenings which succeed hot days of sunshine, that it appears to be most busy and full of life. If a field infested with them be visited with a lantern at this time, such hosts as were little imagined, will be found busily hovering about the grain, the most of them with wings and legs extended, dancing, as it were, slowly up and down along the ears, intently engaged in selecting the most suitable spot where to deposit their eggs. This being found, the insect alights, and standing upon the outer glume or chaff of the kernel, curves its abdomen so as to bring its tip in contact with the surface of the glume. It now toils industriously to insinuate its ovipositor through the scale, which is not accomplished without considerable exertion. Thus the eggs are deposited, from six to ten in number. These eggs are nearly round, very small, of a slightly yellowish color, and are hatched in about a week after they are deposited.

From this egg proceeds the larva, which is a minute, oblong, soft worm, without feet or hairs, whitish at first, but soon changing to a bright amber or orange yellow color. It moves but slowly, by a wriggling motion of its body. When full grown, this worm is less than the tenth of an inch long, of a rich orange color, and oval shape. Having reached this state about the time that the grain is ready to be cut, it waits a warm rain or heavy dew, when it descends, most probably by night, by gliding down the moistened stalk and enters the ground. Here it remains during autumn and winter, preparing for its transformation into a winged insect, when the general heat of spring shall arouse it to a new existence. Facts show that when the grain is cut before the descent of the larva or maggot, great quantities of them are often carried into the thrashing-floor, and may be found among the screenings of the wheat. These being *kindly* emptied out by the farmer into his barn-yard, have a secure asylum previded for them until the coming season.

Its Natural Enemies.

It appears that the most effective destroyer of this insect, is the common yellow-bird. (Fringilla trislis, Lin.) This beautiful little bird is in the habit of frequenting grain-fields when the fly is at work, and woodpecker-like extracts the nascent larva from the ears of the wheat. Alighting, it adroitly grasps the wheat-stalk just below the ear, and clinging fearlessly to it, even when swayed to and fro by the wind, with its bill, it parts down the chaff from the grain, and rapidly picks off the worms. Ignorant persons suppose that its object is the kernel of the wheat, not knowing that in common with all our small birds it is the natural friend and ally of the farmer. Sowing the field with lime, at the time when the wheat is in blossom, has been much urged as a remedy against this fly, but facts show that it is not to be depended upon.

Early sowing in the fall so that the wheat will be too far advanced in the spring to be penetrated by the fly, appears the most ready and practicable means of avoiding its destructive effects. In many cases, it is undoubtedly efficacious, but the observations of the writer tend to show that the swarming of the fly covers a space of six weeks or more, during some part of which, the grain must necessarily be in the proper state for the deposition of its eggs.

He recommends that the screenings of the fanning-mill be closely examined, and if the minute yellow wheat-worms are numerous in them, the farmer should consider it a sacred duty which he owes to himself and his neighbors, to consign these screenings at once to the flames. If there are but occasional worms among them, let them be emptied into the hog-trough, but never empty them upon the ground, or among the straw of the barn-yard, unless they appear to be entirely free from these vermin. Farther experiments are necessary to determine in what manner the perfect insect may be most successfully attacked.

Importation of Alpacas.— Ex-Governor Paine, of Vermont, has sent orders to South America for a number of Alpacas, with a view of naturalizing them if possible in that State.

SELECTIONS.

Pigeons. — Five thousand pigeons are in an open field near Portland, Maine, with their wings clipped, fattening for market. Sixty thousand will be carried to that market during the present season.

Western Lands. — The Buffalo Commercial informs us that the numbers of acres of public lands sold, together with the amount of money received in Wiskonsan this year, is estimated at 360,000 acres and $400,000 revenue.

Aqua ammonia (a solution of common hartshorn in water,) will afford immediate relief from the sting of bees, or musketoe bites; and sometimes the bites of serpents.

To Preserve Hams from the Fly. — These are effectually preserved from the fly, while their quality is not at all injured, by throwing red pepper upon the fire in the smoke-house during the latter part of the operation. — *Tenn. Agriculturist.*

A new potato digger was recently exhibited in operation at Salem, West Jersey. It threw out upon the ground, with two horses, at the rate of five or six acres per day, and as fast as thirty hands could pick up and carry them away. The soil produced 400 bushels of potatoes per acre by the use of compost muck. — *Newark Adv.*

When Dr. Franklin was serving an apprenticeship to the art of printing, he was allowed thirty-seven and a half cents per week for his board. Of this he expended seventeen and three-quarter cents. What he saved was expended for useful books. What an example of economy for apprentices!

Indiana Cotton. — The Rising Sun Blade of the 17th instant says: "We have been presented by Mr. Mr. Israel Loring, with five balls of cotton, which he raised on his farm in this county. Mr. L. has been extensively engaged in cultivating cotton in the south, and says the cotton raised in Indiana is not inferior in quality to that raised in the southern States — the only difference being in the yield. He thinks about half a crop can be raised when the seasons are as favorable as the past has been."

English Grain and Flour Measure. — A friend informs us, says the Pennsylvania Inquirer, that the English quarter of wheat is 560 lbs., or a quarter of a ton, and is equal to eight English bushels of seventy pounds each, or nine and one-eight American bushels of sixty pounds. The English sack of flour weighs 280 lbs., and seven sacks are equal to ten American barrels of 196 pounds each.

Cure for the Bite of a Rattlesnake.—"Below I send you," says a letter from Dr. R. North, of Mobile, to the editor of the Cultivator, "a receipe for the cure of a rattlesnake bite, which has been used by a physician of our city, Dr. Woodcock, who has found it nearly always to succeed. I have used it several times in my practice, and it succeeded.

R. Aqua ammonia,
Spts. Turpentine,
Tinct opii, of each 1 oz., mixed together.

Take a teaspoonful every hour until sleep comes on. For a child three years old, half a teaspoonful every half hour; and wash the part frequently with the same."

A Novelty Indeed. — There are some stores on Foster's wharf, Boston, which are covered with *brick*, in place of slates! The roofs are double boarded, then covered with tarred paper laid on with hot pitch, shingle-fashion, three thicknesses or separate layers. The bricks are embedded in hot pitch, which rises between the joints and meets a coat of sand, forming a solid mass, which has much the appearance of a side-walk. The bricks are an inch and a quarter in thickness. There can be no doubt of those buildings being fire-proof, we should imagine!

Keeping Warm all Winter with a Single Log of Wood. — To enjoy health, warmth, peace of mind and a vigorous constitution, if you have nothing else to do, take a log of wood of moderate size, carry it to the upper garret and throw it from the window into the street, taking care, of course, not to knock any body on the head; this done, run down stairs as fast as you can; take it up again to the garret and do as before. Repeat the process until you are sufficiently warm — when you may lay away the log for another occasion.
Old Recipe.

Asthma.—Make a strong solution of saltpetre. dip clean paper in the solution until it is well saturated. Dry the paper in the sun or by a slow fire. Cut the paper thus dried into strips, and burn them in a vessel, so that the *asthmatic* may breathe in, or inhale, as much of the smoke as possible.

Make cigars of the paper, if you choose, and smoke them. This is the most agreeable method of application.

CONTENTS OF THIS NUMBER.

Mr. Hoffner's Seat, An agreeable Trouble, 33
A table of Peas, Root-grafting, - - 34
Cutting and keeping Grafts, Prospect of Frost-blight, - - - - - 35
On the adoption of Seedling Fruits, - - 36
Enquiries: — Stone and marl Lime, Hot-beds, Breaking Cows, Timber, Moss on Fruit-trees, Yellow butter in Winter, - 37, 38
Potatoes in Maine, Condensed Correspondence, - - - - - - - 38
Springs in Wayne County, - - - 39
Mistakes Corrected, - - - - 40
Keeping Parsneps in Winter, - - - 41
Native Grapes, Gapes in Chickens, - - 42
Sunflower-seed Oil, Keeping Cabbages in Winter. - - - - - - - 43
Seedling Apples, Putnam Russet, - - 44
Letters of a Cosmopolite, No 1, - - 45
Essay upon the Wheat-fly, - - 46, 47
Miscellaneous, - - - - - - - 48

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